### PUBLIC COMMENT on PROPOSED BUILDING STANDARDS

For Publication in Title 24, California Code of Regulations

#### Instructions

- 1. Use of this form is optional. Its use will help the California Building Standards Commission (CBSC) and other state proposing agencies to correctly administer your comments.
- 2. For matters to be considered by a CBSC Code Advisory Committee (CAC), written comments should be received in the CBSC office 7 days before the scheduled CAC meeting to help ensure CAC consideration.
- 3. For matters subject to a 45-day or 15-day Public Comment period announced by a Notice of Proposed Action (NOPA), written comments must be received on or before the close of the comment period identified in the NOPA available at CBSC website <a href="http://www.bsc.ca.gov/">http://www.bsc.ca.gov/</a>. Written and oral comments may be provided at the CBSC public meeting to consider the proposed building standards.
- 4. Separate comment submittals are necessary for CAC and Public Comment periods. Separate comment forms are necessary for each state agency proposal.
- 5. This form is available in Fill-and-Print format at CBSC website <a href="http://www.bsc.ca.gov/">http://www.bsc.ca.gov/</a>. Otherwise print the form, type or complete by hand and attach additional sheets if necessary.
- 6. Submit comments to the CBSC, 2525 Natomas Park Drive, Suite 130, Sacramento, CA 95833-2936, or by Email at <a href="mailto:cbsc@dgs.ca.gov">cbsc@dgs.ca.gov</a>. Please do not FAX comments.
- 7. For assistance, call the CBSC at (916) 263-0916, or Email CBSC at <a href="mailto:cbsc@dgs.ca.gov">cbsc@dgs.ca.gov</a>.

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Proposed Building Standard Identification
Title 24 Part No. (circle one) 1 2 2.5 3 4 5 6 8 9 10 11 12 Section No. 3803.6
Proposing State Agency
The proposed building standards is: Before a CAC In a 45-day Comment Period (check one) In a 15-day Comment Period.
Your recommendation based on the criteria of Health and Safety Code Section 18930(a) printed on the reverse side is: (check one)  Approve  Disapprove  Further Study Required  Approve as Amended
Comment/Suggestion on Title 24 Proposed Building Standard:
3
Identification of Attachments
Check if you have attached additional pages. The number of pages attached: 2
For CBSC Office Use Only: Date Received: Rulemaking Item #

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**3803.6** Use of flammable and combustible liquids. The use of flammable and combustible liquids for liquid extraction processes where the liquid is boiled, distilled, or evaporated shall be located within a hazardous exhaust room, facility, or fume hood, rated for exhausting flammable vapors and designed by a licensed professional. Electrical equipment used within the hazardous exhaust fume hood shall be is not required to be rated for use in flammable atmospheres. Heating of flammable or combustible liquids over an open flame is prohibited.

## Rationale for revision:

These regulations as written are an inconsistent amalgamation of statutes from various states. Specifically, when it comes to flammable and combustible liquid extraction, they are prohibitively restrictive and do not allow for sound engineering judgment. They focus on the small, lab-scale operations of the extant cannabis industry and unfortunately do not anticipate the professional, large-scale industrial extraction operations that will become common as this industry matures.

The section governing extraction reads:

3803.6 Use of flammable and combustible liquids. The use of flammable and combustible liquids for liquid extraction processes where the liquid is boiled, distilled, or evaporated shall be located within a hazardous exhaust fume hood, rated for exhausting flammable vapors. Electrical equipment used within the hazardous exhaust fume hood shall be rated for use in flammable atmospheres. Heating of flammable or combustible liquids over an open flame is prohibited.

**Exception:** The use of a heating element not rated for flammable atmospheres approved where documentation from the manufacture or approved testing laboratory indicates is it rated for heating of flammable liquids.

Not only are many of these terms poorly defined ("rated for use" implies C1D1 or C1D2 but specifies neither) but the proposed regulation neglects the possibility of larger scale extraction operations, which do not fit into a "fume hood" as the phrase is commonly understood. For this reason, the phrase "fume hood" is problematic and limits potential scale-up options for extraction processes. Allowances should be made for an appropriate licensed design professional to engineer controls, or prescriptive guidelines should be established based upon the definitions of a hazardous environment from the National Fire Protection Association (NFPA) 70.

Additionally, a "fume hood" is generally understood to have 80-100 ft/min capture velocity across the face of the unit. This typically provides an air exchange rate of multiple times per minute, all but eliminating the possibility of a "flammable atmosphere" being created. For this reason, the sentence "Electrical equipment used within the hazardous exhaust fume hood shall be rated for use in flammable atmospheres" is unnecessary and prohibitive. It ignores the natural relationship between ventilation, hazardous classification, and the flammability of a substance. A flammable environment can be mitigated by extreme ventilation rates, so that even in the case of a catastrophic release a flammable concentration of a substance is never reached.

These rules essentially make it easier to build a flammable gas extraction room than a flammable liquid extraction room. It goes without saying that flammable gases are far more flammable as measured by their Flash Point, yet there is no provision allowing the same controls used for flammable gas extractions to be used for flammable liquid extractions.

# STATE OF CALIFORNIA BUILDING STANDARDS COMMISSION

In all, the flammable liquid extraction statute (3803.6) needs alterations to:

- Allow for large scale flammable liquid extraction outside of a fume hood
- Allow for flammable liquid extraction to use the same engineering controls as a flammable gas extraction
- If the language requiring a fume hood is kept, allow for equipment that is not rated for use in flammable atmospheres inside of a fume hood.

For reference, we also incorporate the Health and Safety Code section 18930(a) as part of our comments.

## Health and Safety Code Section 18930(a) reads:

- (a) Any building standard adopted or proposed by state agencies shall be submitted to, and approved or adopted by, the California Building Standards Commission prior to codification. Prior to submission to the commission, building standards shall be adopted in compliance with the procedures specified in Article 5 (commencing with Section 11346) of Chapter 3.5 of Part 1 of Division 3 of Title 2 of the Government Code. Building standards adopted by state agencies and submitted to the commission for approval shall be accompanied by an analysis written by the adopting agency or state agency that proposes the building standards which shall, to the satisfaction of the commission, justify the approval thereof in terms of the following criteria:
  - (1) The proposed building standards do not conflict with, overlap, or duplicate other building standards.
  - (2) The proposed building standard is within the parameters established by enabling legislation and is not expressly within the exclusive jurisdiction of another agency.
  - (3) The public interest requires the adoption of the building standards. The public interest includes, but is not limited to, health and safety, resource efficiency, fire safety, seismic safety, building and building system performance, and consistency with environmental, public health, and accessibility statutes and regulations.
  - (4) The proposed building standard is not unreasonable, arbitrary, unfair, or capricious, in whole or in part.
  - (5) The cost to the public is reasonable, based on the overall benefit to be derived from the building standards.
  - (6) The proposed building standard is not unnecessarily ambiguous or vague, in whole or in part.
  - (7) The applicable national specifications, published standards, and model codes have been incorporated therein as provided in this part, where appropriate.
    - (A) If a national specification, published standard, or model code does not adequately address the goals of the state agency, a statement defining the inadequacy shall accompany the proposed building standard when submitted to the commission.
    - (B) If there is no national specification, published standard, or model code that is relevant to the proposed building standard, the state agency shall prepare a statement informing the commission and submit that statement with the proposed building standard.
  - (8) The format of the proposed building standards is consistent with that adopted by the commission.
  - (9) The proposed building standard, if it promotes fire and panic safety, as determined by the State Fire Marshal, has the written approval of the State Fire Marshal.